1: Petrullo E-3 (1933-34) 1939 S519 Yaruro S519

123 men. A female ethnologist might get an interesting, and perhaps different, picture of Yaruro culture. I do know that there were many things, especially in the field of shamanism, from which I was shut off. The Yaruros saw this and the women relayed a pressing request that on my next visit to them I bring my "wife" (I have none!), with whom they could lie on the sands at night and tell things about their world similar to what their men told me.

My visit took place in the months of February, March, and April of 1934. Several species of intestinal parasites acquired in Brazil not only precluded my roaming about the countryside, but forced the Yaruros to attend me day and night for many weeks, giving ample opportunity—once it lasted for thirty-four consecutive hours—to talk. A sedentary life is so foreign to a nomadic people that this chance to corner them for "talk" was too good to miss. In fact, after a while it was becoming too much for them, and besides, hunting in the area became impractical. Everything considered, we reached a saturation point and I started on my way back. Many of these friends may be dead by now.

The Yaruros and Their Country

Yaruro Daily Life

101 131 181 Peaceful and mystical, the Yaruros, or Pumeh as they call themselves, wander up and down the Capanaparo and Sinaruco Rivers (fig. 15) gathering their daily dinner and thinking about the life awaiting them in the Land of Kuma when they leave this world.

361 ● 133 As dawn breaks over the hills of Guiana we may discover a Yaruro camp on one of the sandy beaches of the Capanaparo River about a day's journey by canoe from where it flows into the Orinoco. It appears as a dark blotch on the wind-packed white sands at a distance of some 50 yards from the water's edge and more than that from the wall of vegetation which marks the bank of the river during the rainy season and hides the open savanna country beyond. The camp gives no sign of life until the sun shows clearly in the sky. Then we see that it consists of some leafy branches and 3-foot sticks bare of bark thrust in the sands, casting long shadows in the early morning to where the vultures are fighting among themselves at the refuse heap located to the west of the camp; or the white vulture, the "king," may be seen feasting alone while his black brethren await disconsolately on the side.

361 As the light becomes stronger we make out under the branches piles of debris, recumbent human forms, and mangy dogs tied to the sticks. The debris consists of baskets and pots, with here and there small

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

361 cheesecloth contraptions no more than 2 feet high under which human beings are sleeping half buried in the sand.

361 136 Approaching the river, we see canoes pulled up on the sands and discover that there is more debris close by, but its owners are not in sight. In the water close to the canoes are turtles with their hind legs tied to the front ones. Some of these are also fastened to the canoes, by means of strings which pass through holes drilled in their carapaces. They make fruitless efforts to move away whenever anyone comes near to them.

131

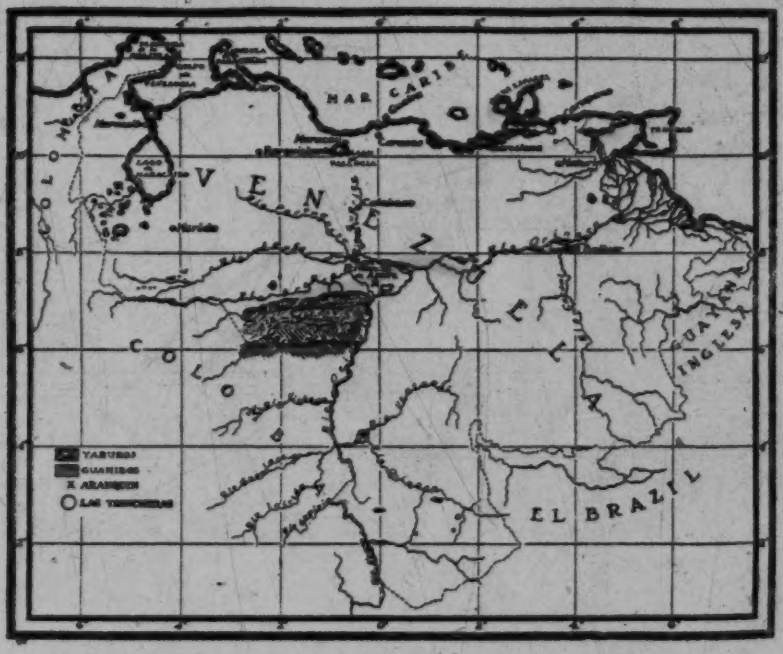

FIGURE 15.—Map of Venezuela.

361 ● 133 It is not a large camp, and the sleepers do not number many. As we look around us they appear to be insignificant and lost in immense space, so distant and even is the horizon. Only to the east do we see a wall of shadow rising a little above the horizon. It is all that can be seen of the hills of Guiana across the Orinoco not far away. In the early morning light they look like mountains, though they are only a few hundred feet high.

512 The awakening of a Yaruro camp is quiet, almost surreptitious. As the grayness of the landscape gives place to bright orange-gold, some of the sleepers are up, squatting with their legs doubled under them. They face the west; they do not move, merely sit still watching

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

stop to talk, rest, and later sleep. Twenty-four hours of Yaruro life have gone by. The stomach must be considered again.

THE LLANOS

The country of the Yaruros is a low plain lying south and east of the Venezuelan Andean mountain spur between the fifth and sixth degree of North Parallel. On the east it is flanked by the Orinoco, with the hills of Guiana beyond the river, and on the south the plain rolls away to Colombia. This vast inland plain is burned by a tropical sun the year round and nowhere is there a degree of elevation to relieve one from the intense heat. Fortunately there is no barrier to the trade winds which often blow too hard for human comfort but which, nevertheless, make life bearable by cooling the body and blowing away insect life. During the dry season this plain is a veritable desert with scant vegetation except along the river banks and by water holes. In the rainy season it becomes a vast inland sea rich in animal and plant life. The temperatures during the day are always high. In the plains of Apure 130° F. have been recorded a few feet from the ground. In the middle of the day animal life is practically at a standstill. Cattle and horses which roam the plains half wild or completely so rest quietly. The cowboy withdraws to the shelter of a grass roof; the traveler retires to the shade of a bush, provided he can find one; but the Yaruro seeks the river banks where the winds are freshest and there is always the branch thrust in the sand to give him some shade. In midafternoon the winds abate somewhat, but rise again as the sun sets. There is another lull just before midnight, but in the early morning the wind blows a gale, driving the well-equipped traveler under his blankets and the Yaruros to the warmth of sand pits. Shelter from the wind means intolerable insect life. One must remain exposed to the ever-blowing wind to find any comfort.

It is said that a geologist prospecting unsuccessfully for oil ended his report with the statement, "The plains of Venezuela, or as they are known, the llanos, are rich—in water." He would have been more accurate had he said that the llanos are rich in winds, in dust and sand, insects, and, in the rainy season, flora and fauna.

The llanos would form a desert were it not for the rivers which, fed by the Andes, flow into the Orinoco. The largest of these are the Apure and the Meta. Between them flow the Capanaparo and the Sinaruco. Fishes are plentiful in these rivers. Along the banks are found an abundance of birds, among which ducks, cranes, and storks predominate. Smaller birds give color and song to the country. Near the Orinoco species of sandpipers crowd the sand bars. Hawks and vultures are a common sight.

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

We camped on a large wind-swept beach on the Capanaparo and waited there for Landaeta. While waiting I made visits about the country, seeking out Yaruros wherever I could find them. In one nearby group I noticed that unlike most of the Yaruros, these had built permanent shelters, constructed similarly to the houses of the ranchers. However, there was one significant difference. With true Indian logic, they had left the walls open at the bottom, so that the wind could sweep through the house and keep it cool and free from insects.

One morning we embarked to visit a group led by Pablo Reyes, being on an island in the Orinoco, at the mouth of the Capanaparo. Pablo Reyes had been described to us as a very old and very wise man. Borrowing a small dugout, we set out to visit him, traveling mostly by night. On our way we saw and heard a great deal of animal and bird life, for the lower part of the river was less hunted by the Yaruros than the upper part. On the banks we saw numerous tracks of the cats, we saw many capibaros or "chiguires" and we were often serenaded by the roar of the howlers.

Our entrance into the Orinoco was dramatic. We were catapulted out of the swift waters of the mouth of the Capanaparo and staggered about among the powerful cross currents and eddies at the confluence of the two rivers. The east wind made travel no easier, as it was blowing a gale. On the far side of the Orinoco were the hills of Guiana, rough and jagged, with gnarled vegetation, and dark patches of jungle growth. There were several islands of odd shape, and one of them, about halfway across the Orinoco, was the Linda Bara, to which we made our way.

Encamped on this island we found Pablo Reyes' band and a number of "Racionales," that is, "civilized," Venezuelans of the llanos, who during the dry season take to living like the Indians, except that they clutter their shelters with civilized equipment. The result is that their houses are infested with parasites of all kinds. However, they too live upon crocodiles, turtles, and the eggs of the latter.

This portion of the Orinoco is, in late March and early April, the gathering ground of both Indians and Racionales. The region teems with turtles. By common agreement, stretches of the beaches where the turtles are known to gather in large numbers are not hunted until April, at which time the people dig up thousands and thousands of newly laid eggs out of which they make an oil for export. The center for this commerce is the little settlement of La Urbana, originally a Capuchin mission established about 1750.

Like Landaeta, Pablo Reyes had also learned of my coming, and was ready for me. He too is a shaman, and delights in speaking to a sympathetic listener about religious themes, of his conception of

1: Petrullo E-3 (1933-34) 1939 SS19 Yaruro SS19

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[123]

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1. Llanero horseman. Note the toe stirrup and lack of bridle. 2. Author's party traveling across Apure. Note the rope tied to the horse's tail and the bull's nose. 3. Sand dunes in the Llanos of Apure.

End Plate 0

2:Leeds E-5 (1958)1961 SS19 Yaruro SS19

YARURO INCIPIENT TROPICAL FOREST HORTICULTURE

Possibilities and Limits

Anthony LEEDS

The immediate concern of the papers in this symposium is the interaction between human populations and their habitats through the agency of horticulture insofar as factors in this interaction result in the evolution of culture. The present paper discusses an Incipient Tropical Forest Slash-and-Burn Horticultural group, the Yaruro of the south-central Venezuelan llanos, in order to show what kinds of upper limits were set upon its development by its technology and habitat, or both, and what sorts of factors within the relatively limiting conditions of incipient tropical forest horticulture might have provided a foundation for evolution to a more developed state. For any of the cultures wich[1] are examples of this class of horticulturalists, slash-and-burn horticulture plays a considerable, but usually not, by itself, a dominating role in the total food procurement process. The Yaruro fall between the Incipient and Intermediate Tropical Forest types discussed in the introduction, whereas the Siriono, for example, represent a culture near the lower limits of cultures of the type. Despite their somewhat more advanced condition, what pertains to the Yaruro, in a general way applies to the rest of the type.

We shall consider first the habitat conditions in which the Yaruro find themselves and then describe the major dimensions of their swidden horticultural technology. With these aspects of the total ecology before us we shall show how its characteristics provide us a model for our incipient tropical forest stage and at the same time demonstrate how its special ecological conditions inhibited its further evolution into the more advanced stages of horticulture.

The Venezuelan llanos stretch as a low inland plain from the Orinoco delta, W by WSW, 750-800 miles inland, to the edges of the Andes in the far west of Apure State and into Eastern Colombia. The Yaruro are found between 450 and 600 miles from the mouth of the Orinoco, but still inside Venezuelan frontiers. They are found on all the rivers from the Arauca to the Cinaruco, inclusive, a distance of about 90 miles from north to south.

[1] [probably should read: which--Analyst]

●133 As one goes inland from the coast and westward through Yaruro territory, the land slowly rises so that the town of San Fernando de Apure is about 100 feet above sea level; Palmarito de Guachara, about 60 miles southwest, is just 145 feet; and the Cinaruco river about 100 miles SSW is about 190-200 feet. From the middle Cinaruco, the site of the writer's field work, to the sea, the average slope is 0.007% or 4 ½ inches/mile, but the slope increases gradually as one goes west till nearly 200 miles to the west, the plains abut on the Andes where, within a space of about 50 miles, the land rises from about 650 feet to over 12,000.

132 The slope of the land is paralleled by a gradual increase in total annual rainfall and length of rainy season, respectively averaging for the region as a whole about 1600 mm (63") annually,[1] and about 5 months of heavy rains with 2-3 transitional months of unsettled weather with considerable rain. The slope and climatic gradations are paralleled, furthermore, by an 134 orderly series of soil and vegetation types. As one moves steadily nearer the mountains, the soils change from muds, as at San Fernando, to muddy and sandy loams at Guachara, to sands and sandy loams in the central Cinaruco, and increasingly to sands and pebbly areas. These micro-ecological [134] differences appear to determine micro-cultural differences among various groups of Yaruro as one goes westwards, for example in the specific content of the cosmology. Space only permits us, here, to deal with the Cinaruco area.

133 The dip of the strata, hence drainage, is from West to East. The slope of the dip is so small, as we have noted, that at the first sizable rains, the flow exceeds the carrying capacity of the stream beds and flooding occurs. Thus, during the rainy season from May through September, [132] during which from 85-90% of the annual rain occurs, there is a constant tendency to flood, while during the driest months from December through March, not more than a total of 3 inches falls, and the rivers and landscape dry up often totally, presenting desert-like conditions. Because the topography of the central Cinaruco area is not level in large areas, and even in the flat parts, is raised above the level of the streams, flooding occurs more because of accumulated rain in low spots where it cannot drain than from overflow from streams. The streams themselves are swollen and in places overflow their banks for short distances before they are enclosed by the higher terrain. The west-east dip of the land an the east-west prevailing winds combine to make surface land forms, such as sand dunes and creeks, called *caños* (Y. *doro*) run east and west also.

133 In the central Cinaruco area, the creeks on the north side of the river 137 are contained in a sort of basin formed by a row of dunes, perhaps as high as 100 feet above the neighboring savanas, almost 300 feet above sea level, running east and west for many miles at a distance of 3-5 miles from the Cinaruco. On the south side of such "ranges" of dunes, a creek like the Totúdoro is likely to be found. On its right bank, sometimes at some [134] distance back from the normal high water mark, it is contained by the edge of the flat, sandy, coarse-grassed savana, which is marked by a continuous

1 [for footnote see category 116, p.42 --Analyst]

narrow band of soft, red-brown, heavy pebbles, sometimes agglomerated into chunks as large as a man's head. These, the only stones of this area, are entirely absent to the north-east and are technologically useless. Between these bands, which appear to represent flood levels or banks of older streams into which the present beds have been incised, and the streams themselves, low-lying areas are found which are soggy to a depth of a couple of inches above a clayey-sandy hardpan, and are covered with a sleezy layer of organic remains. Grasses appear slightly less barren here than in the areas beyond the pebble banks, the savanas proper. 133 134 [137]

The savanas run east-west for miles and may be one or more miles wide, broken here and there by either strips of dunes or patches of woods, called *montes* (Y. *hôi*), growing in somewhat saucered hollows which may once have been parts of stream beds. On the upper level savanas (Y.*ciri*), the soil is largely sandy, with occasional scatterings of pebbles at the juncture with the lower savana level, 12 to 15 feet below it. Grasses are course, tough, long-rooted, and sparse, giving a barren, yellow appearance even in mid-rainy season. Only a few scrubby trees are seen on the open moors, mostly in wetter spots. These sandy savanas have long since been leached of practically all mineral content, as soil tests show.[2] The savanas constantly tend to lose their finer particles of soils, which are deposited near the streams where the latter have cut down a few feet into the surface of the savana. Thick and rich soil layers are thus created. It is in such layers that soils mechanically more suitable for horticulture combine with a water supply which suffices not only in the wet season, but also provides a dry-season water table accessible to long-rooted flora. This combination fosters the growth of gallery forests, here, which constantly add humus to the very limited areas of better soils provided in this habitat. The width of these layers depends on the depth of the stream's incision and the amount of flow as well as on the presence and relative distance of the dunes and the high and low savanas from the streams, and on the slope and width of the low savana next to the stream. Maximum width of these layers occurs where the streams are more incised and the slope from the higher savana to the streams is a steady descent, so that drainage occurs without flooding and waterlogging, while the dry-season water-table is not too far below. Under any other conditions, these places are narrow, or may almost disappear. Thus, the mouths of *caños* have narrow or no strips of gallery forest since the level of the savana is little above that of the stream, and little soil accumulates at the same time that flooding is heavy. On the upper reaches of streams, *caños* are little incised, the slope from the high savana is insufficient to have deposited much soil, and the forest again disappears. Thus only the median stretches of streams are well-forested and it is only in these areas that horticultural soils are available. Only the *montes*, those depressions in the savana surfaces, which, though above permanent water, nevertheless are nearer the water table than the surrounding savana, provide other suitable, if dry, areas for planting. Here too are found tall tropical hardwood forests which somewhat enrich their own soils by a very thin layer of humus. 137 134 [133]

[2] [for footnote see category 116, p. 42--Analyst]

area is only such in reference to the presence of a given technology. The presence of such a technology is not guaranteed in any particular culture by any historical, evolutionary, geographical, or ecological necessity. Its presence may entail a particular historical explanation or a general evolutionary one. In any case, its absence entails the absence of the use of certain resources whose presence we can observe only in retrospect. 311

Other resource areas besides those utilized because of the presence of horticulture among the Yaruro become available by their possession of hunting, gathering, and fishing technologies, as well as recently acquired animal husbandry in the form of pig-herding. Hunter animals include deer, armadillo, capybara, paca, peccary (?), iguana, and a number of birds (see Table II, p. 4)[1]. These are variously distributed spatially according to the specific ecological niches for which they are adapted. Thus deer are apparently usually found dispersed in the somewhat damper, low-lying savanas where grass is greener and water more available away from the scene of human activity. Armadillo are found distributed throughout the savana. Other species, however, such as the capybara, live near the edge of permanent waters, mainly the rivers. Alligators also live only in the rivers. The faunal carrying capacity of the savanas appears to be quite low in the Cinaruco llanos since foraging foods for larger game animals are sparse. It is important to note that not only is the overall carrying capacity governed by the minimum average food supply of the savanas in the florally more restricted dry season,[2] but the distribution of animals varies considerably from the wet to the dry season. In the latter, animals tend to cluster nearer the rivers or the widely dispersed water holes. Consequently, the locus of hunting must also shift seasonally (see Maps)[2]. Savana hunting techniques are neccessarily different from those used in procuring food in the rivers, whether hunting alligators or capybara, or, of course, fishing. There is some seasonal variation in the locus of fishing, too, although this is much less marked on the Cinaruco than on the freely-flooding streams of the flatter, more north-easterly savanas of the Apure llanos. In the rainy season, fish move up the larger streams into somewhat shallower waters where more plant and insect food is available to them. However, they are apparently unable to move up smaller streams which often have rapids-like stretches interrupting their course. Thus fishing in the rainy seasons is directed towards the larger creeks and away from the smaller creeks and the river itself, where the water has become too deep for successful fishing since the fish are scarcer and more difficult to see in the deep, swift currents of winter. In respect to animal husbandry, recently introduced pigs are pastured anywhere in the savanas but preferably next to the village or quite a distance from it, in either case far from the nearest gardens (Sp. *conuco*, Y. *tadó*), an effort which is rarely successful, since the pigs, in their wisdom, are among the main predators on the garden crops. Gathering may be carried out in the dry or the wet savana depending upon the plant food to be gathered, or it may be carried out near the creeks especially for the fruit of the moriche palm. The rivers do not appear to be used in gathering. 224 137 [221] 226 133 231 [241] 222

[1] [See pp. 35-37, category 116 --Analyst]
[2] [See pp. 40-41, category 102 --Analyst]
[17] [for footnote, see p. 42, category 116 --Analyst]

4: Leeds E-5 (1958) 1960 SS19 Yaruro SS19

Antropológica

[P. 1]

SOCIEDAD DE CIENCIAS NATURALES LA SALLE
Ap. 681 — Caracas - Venezuela

Número 9 31 Enero 1960

THE IDEOLOGY OF THE YARURO INDIANS IN RELATION TO SOCIO-ECONOMIC ORGANIZATION

Anthony LEEDS

121

It is the purpose of this paper to show the correspondence between the principles of socio-economic organization of the Yaruro Indians and their ideology and to isolate some dimensions of ideology which may be used for comparative purposes. It is hoped that by further isolation of such categories it will eventually become possible to compare the structure and content of widely different ideologies, as we today are able to compare kinship systems, so that we may be able to recognize synchronic regularities of a functional order and diachronic regularities of an evolutionary sort. Yaruro religious and philosophical beliefs are reduced to a series of postulates or axioms about the nature of the universe and man in an analysis somewhat like Kluckhohn's study of Navaho philosophy and Opler's of Apache themes. (1). No Yaruro would be able to express the axioms nor see them in the logical series as presented here, yet each would recognize them, when couched in the phrasings of his own language, as referring to his particular *Weltanschauung*. The postulates are derived from direct statements by informants about the cosmos or about human living, from other verbal materials such as discussions of disease and social organization, and, more occasionally, from observed behavior. The generalized titles introducing each of the summarized postulates appearing at the end of the paper comprise the dimensions, here inductively arrived at, which may serve for cross-cultural analysis.

101
[131]

The Yaruro Indians have been living in the savannas or llanos of Southern Venezuela for an unknown number of centuaries. They have developed a socio-economic life well-articulated to the geographical conditions of life.

139
137

The gross geographical characteristics of the alternately desert-like and flood-covered llanos cause all the best economic resources to be concentrated

(1) Kluckhohn (1949); Opler (1945).

4: Leeds E-5 (1958) 1960 SS19 Yaruro SS19

133 137 along the west-to-east flowing rivers in ribbons some kilometers wide. Most significant fauna and flora of economic use occur in these ribbons. This ecological distribution of resources governs subsistence activities whether they be mainly hunting, fishing, collecting, or horticulture.

241 433 Yaruro subsistence comprises all these activities. (2). Horticulture in the rainy season appears considerably to outweigh all other sources of food together, but in the dry season, hunting, fishing, and collecting perhaps equal or outstrip horticulture. In any case, slash and burn gardening of manioc, corn, plantains, and a number of lesser crops is by far the single most important economic activity. The technology is exceedingly simple in all aspects of [442] production, the main tools being the machete and digging stick. The most elaborate technology occurs in the conversion of food into edibles and in the manufacture of hammocks, pottery, objects of wood such as canoes, and woven containers of all types.

462 The economic organization displays a sharp division of labor between men's and women's work. Men do all hunting and fishing, make all objects of wood, haul lumber and householding materials, make hammocks, and carry out the heavy labor of gardening. Women do most of the collecting of roots, [222] seeds, and fruits. Since collecting contributes a substantial portion of the food supply in summer, woman's contribution, here, is of considerable communal importance. Women's work, a continuous activity from dawn to dusk, is, first, the conversion of raw foodstuffs into edibles. Second, women make all pottery, mats and baskets, the manioc squeezers, and much of the cord used to make hammocks. Another important contribution of women is their help in harvesting in the gardens. Men sometimes help the women with the cookery.

[476] Men may work alone, in groups of 2 or 3, or in larger groups on rare occasions. No occasion exists for all men to work at a single task since there is no technological need for it. Women's work groups for collecting of householding are of similar size. Work group alignments are often based on choice or [592] accident but in other instances coresidence and kinship are determinants. The household, however, constitutes the only really necessary cooperative group for production. The man is a funnel for produce which the woman converts to

114 [122]

(2) The present description applies to the Cinaruco River Yaruro where the major part of the writer's field work, supported by a grant from the Social Science Research Council, was done. The Capanaparo River Yaruro were reported by Petrullo (1939) and Le Besnerais (1948) as being hunters and gatherers, although Le Besnerais observed small horticultural patches which he claimed were diffusions from Venezuelan farmers which had occurred recently. Le Besnerais in 1954 states directly that they were horticulturalists, omitting any mention of possible diffusions from Venezuelans. The passing mention of horticulture by Fiasson (1947) confirms the present writer in his opinion that, although horticulture may be more restricted on the Capanaparo than on the Cinaruco and Cunaviche-Arauca (where the writer also spent several weeks) which are not discussed at all by Petrullo or Le Besnerais, nevertheless, the absence of horticulture is probably not aboriginal with the Yaruro as has been suggested by Kirchhoff (1948, p. 456). Rather the restricted gardening is a result of ecological conditions on the Capanaparo which are less favorable to horticulture than on the neighboring rivers, combined with extremely violent acculturation, including large-scale massacres of natives. The only other possibility, in my opinion, is that horticulture was introduced by the missionaries in the early part of the [797 177] Eighteenth Century, which is certainly the period when the Yaruro first became acquainted with iron tools (cf Lodares, 1922).

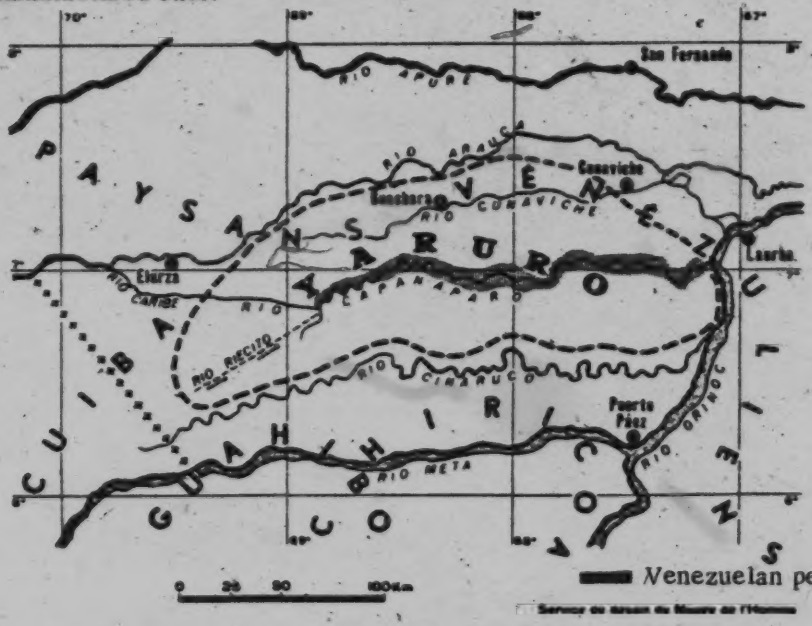
5:Le Besnerais--3 E-5 (1947-1950) 1954 SS19 Yaruro SS19
Jirajara SS12
Guahibo SC14

G 101 114 131 G Y 431

/111 cont./

the territory mentioned above, in the west, and the second in the east along the Orinoco; they meet to the south of the Cinaruco, the northern limit of their territory which lies principally in Colombia. Like the Cuiba, they seem to trade with the Yaruro, exchanges taking place in the Yaruro villages located near the Cinaruco and consisting also of products of their making for manufactured ones.

J G 101 Y 101 102 131 ● 133



Map 1

Correction: Elorza instead of Elurza.

/116/

162 621 342 Each community is comprised of ten to 30 individuals including children (average: 17.9), distributed in one or several habitations of which the type varies according to function and the nature of the terrain and the season (1).

[132] [133]

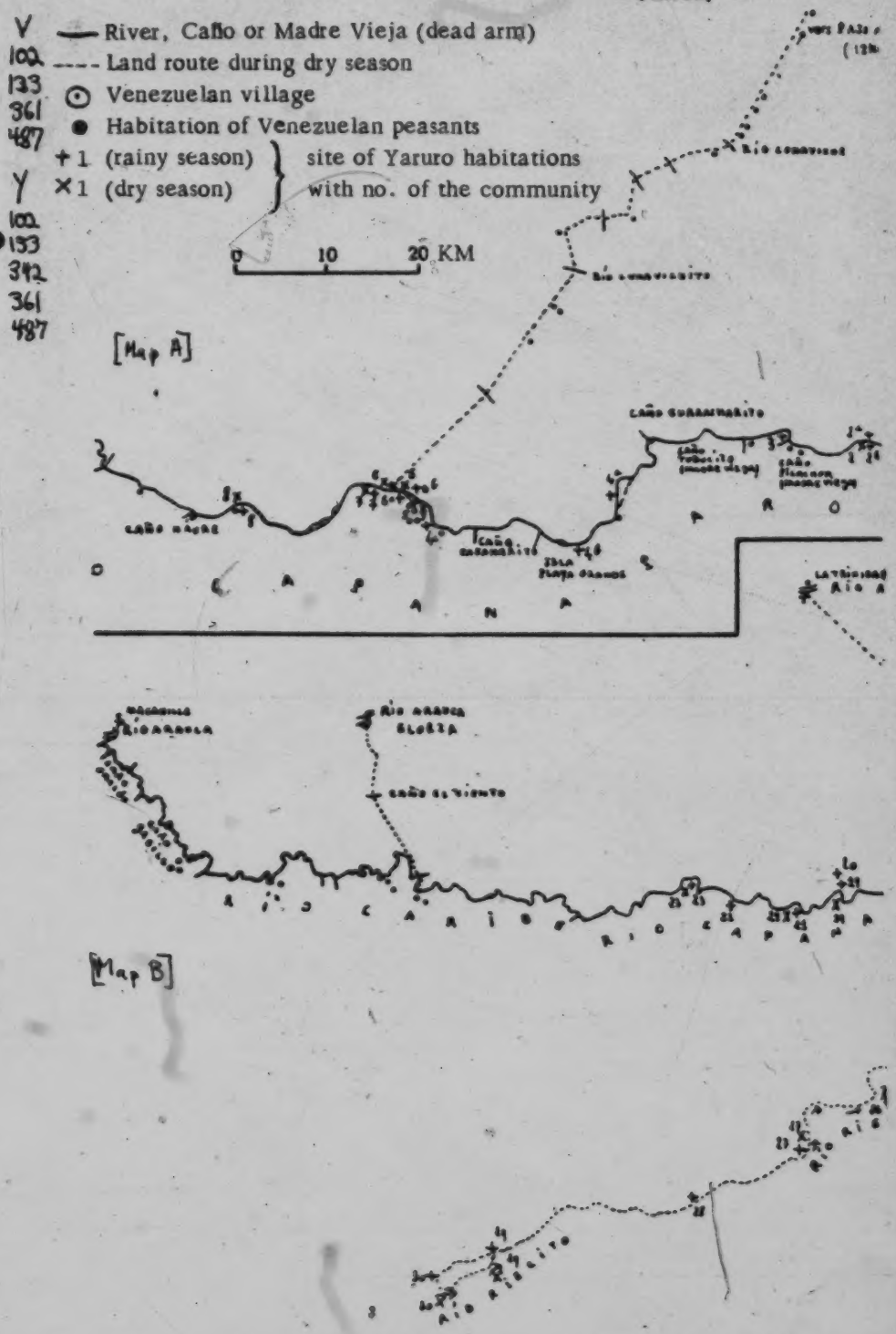
1. The Venezuelan llanos are huge savannas furrowed with watercourses running west-east and bordered with a corridor of forest, narrow but dense; they have a tropical climate characterized by two seasons: a rainy season, winter (June to September), during which the rivers overflow their beds and flood the savanna, and a dry season, summer (December to April), during which the latter become dry in part, uncovering long sandy shores.

342 The first type (I) is an upright house with a rectangular base (sometimes oval), three to four meters wide by five to seven long and three to four high, without walls and covered with a straw or palm roof with two sloping sides, open or closed at one or two ends and protecting from rain. It is built on the hard ground of high banks that the floods of the rainy season do not reach.

The second type (II) is a small, low hut (a man cannot stand in it) with a round base (II a) or oblong (II b), also without walls and covered with a roof of palms, either hemispherical (II a) or with two sloping sides (II b), protecting from rain; it stands on the soft ground of sand dunes and shores raised above the flood level (II 1), or shores freed by a drop in the water level (II 2).

5:Le Besnerais--19 E-5 (1947-1950) 1954 SS19 Yaruro SS19

Venezuela SS1


River, Caño or Madre Vieja (dead arm)
Land route during dry season
Venezuelan village
Habitation of Venezuelan peasants
+1 (rainy season)
×1 (dry season)
site of Yaruro habitations with no. of the community
0 10 20 KM
[Map A]
[Map B]

Map 2. Yaruro Territory

5:Le Besnerais--20 E-5 (1947-1950) 1954 SS19 Yaruro SS19
Venezuela SS1

V
102
133
361
487
Y
102
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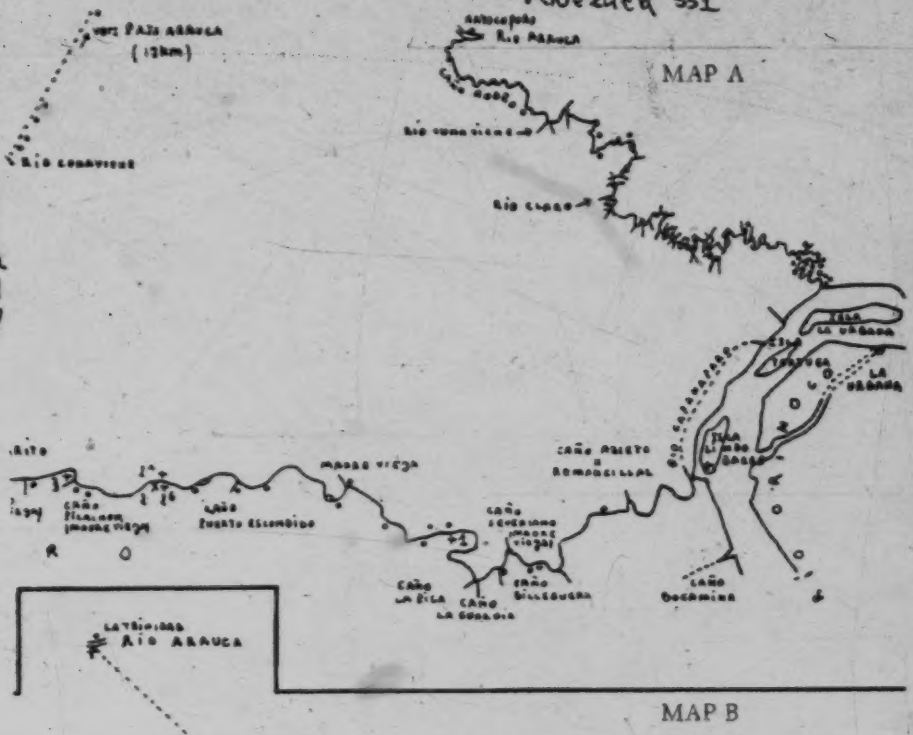
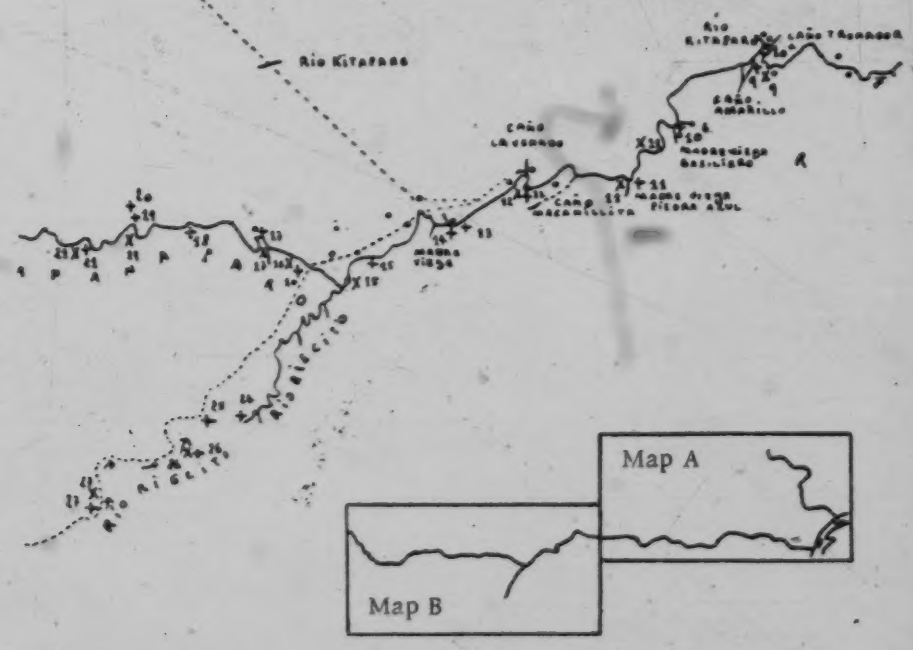
487





Author's correction: In MAP B, the first Yaruro community on the Capanaparo after the mouth of the Riecito should be 16 instead of 10.